

REMARKS

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 11-30 are pending in the instant application. Several claims have been amended to more clearly define the claimed subject matter. No new matter has been introduced through the foregoing amendments.

1. Applicants appreciatively note that claims 17, 18 and 20 contain allowable subject matter indicated in the Office Action. In the Amendment, allowable claims 17 and 20 have been rewritten in independent form by including all the limitations of base claim 11. Therefore, claims 17 and 20, as well as claim 18 which depends on claim 17 are believed to be allowed.

2. Claims 12 and 27 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite. In the Amendment, claim 26 has been amended to depend on claim 23 and claim 27 depends on claim 26. Therefore, Applicants respectfully submit that amended claims 12 and 26 are believed to overcome the rejection. Accordingly, the rejection should be withdrawn.

3. Claims 11-16, 19 and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Saur* (US 4,674,679) in view of *Henschel* (DE 4,231,649). In response, **claim 11** has been amended and now recites that “a valve spring between the main valve member and the guide component and surrounding the expansion element and the entire hollow cylindrical section of the guide component.”(Emphasis added). The applied art individually or in alleged combination fails to disclose or suggest the claimed feature above. The added feature finds support in at least Fig. 2 of the present application.

The annotated figures of *Saur* in the Office Action are noted. As illustrated in the annotated figures of *Saur*, the valve spring 12 surrounds the piston 18 and a part of the guide component, i.e., the spring 12 is not formed to surround the duct 27. Thus, the valve spring 12 does not read on the claimed valve spring which surrounds the expansion element and the entire hollow cylindrical section of the guide component. In addition, Applicants respectfully submit that one of ordinary skill in the art would have not modified *Saur*'s valve spring 12 to surround the entire “guide component”, e.g., the circled area shown in the annotated figures of *Saur*, because the duct 27 is

formed in the housing 23 and the valve spring 12 has no way to be positioned surrounding the duct 27.

Henschel does not cure the deficiencies of *Saur*. As disclosed in Figs. 2-3 of *Henschel*, the spring 6 of *Henschel* is not formed to surround the guide component.

Accordingly, claim 11 is patentable over the art and the rejection should be withdrawn.

The rejected dependent claims are patentable by virtue of their dependency as well as on their own merits.

Claim 12 recites a first plate and a second plate coaxially connected to the first plate, and a sealing ring sandwiched between the two plates. None of the applied art disclose or teach the claimed two plates and the sealing ring as claimed above. Applicants respectfully submit that one of ordinary skill in the art would not have modified *Saur*'s valve disk to have a sealing ring sandwiched between the plates 6 and 17 because the valve disk 6 is firmly connected to the plate 17 as disclosed in column 3, lines 11-12 of *Saur*. Furthermore, *Henschel* does not teach that the sealing ring 13 is sandwiched between two plates. Therefore, claim 12 is patentable over the art.

Further, Applicants respectfully submit that none of the applied references disclose or suggest the claimed feature of **claim 19**, e.g., the guide component comprises a radial flange projecting away from the expansion element and on which the valve spring is directly supported. There is no disclosure in *Henschel* of a radial flange projecting away from the expansion element. *Saur* does not disclose or teach this feature. Further, the design choice rationale in the Office Action is noted. However, Appellant respectfully submits that such rationale is improper as failing to meet the basic requirements of a *prima facie* case of obviousness as detailed in *MPEP*, section 2143.14.¹ Therefore, claim 19 is patentable over the art.

4. Claims 22-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Henschel* and further in view of *Freismuth* (US 2,996,254).

Applicants respectfully submit that **claim 22 and 30** should be allowed because claims 22 and 30 recite similar features to allowable claims 17 and 20, respectively.

¹ The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious.

The other rejected dependent claims are patentable at least by virtue of their dependency as well as on their merits. Claim 29 recites similar feature to claim 19, e.g., the guide component comprises a radial flange projecting away from the expansion element and on which the valve spring is directly supported. Neither *Freismuth* nor *Henschel* discloses or suggests the claimed feature. Thus, claim 29 is patentable. The rejection should be withdrawn.

Conclusion

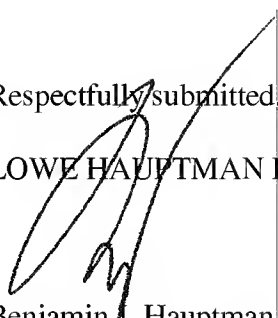
Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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